<u>AMENDMENTS TO THE CLAIMS</u>

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

1. (Currently Amended) An asset fleet health monitoring system, comprising:

a sensor data feed module for providing multivariate sensor data from a plurality of fleet assets;

a database for storing empirical models of assets in the fleet;

an estimation engine disposed to generate estimated sensor values and residuals in response to receiving from the data feed an observation of multivariate sensor data for an asset in the fleet, using a corresponding empirical model for the asset stored in said database;

an incident diagnostics engine module responsive at least to said residuals to determine whether an incident should be registered for said asset; and

a graphical interface module ~~having a hierarchical fleet view of the health status of all assets and~~ <u>providing</u> an exception-based view of all assets <u>currently</u> having registered incidents<u>, said view functional upon selection of an asset from said view to display currently registered incidents for the selected asset</u>.

2. (Original) A system according to claim 1, wherein said estimation engine generates estimated sensor values according to a nonparametric kernel-based method.

3. (Original) A system according to claim 2, wherein said estimation engine generates estimated sensor values according to a similarity-based modeling method.

4. (Original) A system according to claim 3, wherein said incident diagnostics engine comprises rule objects having rules and actions, and executes rules against at least said residuals to determine whether an incident should be registered for said asset.

5. (Original) A system according to claim 4, wherein said incident diagnostics engine has an action stack, and when a rule of a rule object evaluates to a particular condition, an action of the rule object is added to the action stack for execution, and where possible actions include registering an incident for the asset.

6. (Original) A system according to claim 5, wherein an action of a rule object is to activate another rule object.

7. (Original) A system according to claim 1, further comprising a model creation module for processing historic reference data for an asset to generate a model for the asset and storing it in said database.

8. (Original) A system according to claim 7, wherein said model creation module is functional to copy reference data and a model for an asset stored in said database for offline model modification, and further functional to copy a modified model into said database and activate it for runtime processing of incoming observations corresponding to the asset.

9.   (Cancelled)

10.   (Cancelled)

11.   (Cancelled)

12.   (Cancelled)

13. (Currently Amended) A system according to claim [[12]] 1, wherein said graphical user interface module is disposed to provide its views in a format viewable in a web browser, and an asset on [[any]] said exception-based view is hyperlinked to activate a listing of its registered incidents under it in the view.

14. (New) A system according to claim 1, wherein said exception-based view is functional upon selection of said asset from said view to display at least some of the set of sensor data, estimated sensor values and residuals for said asset.

15. (New) A system according to claim 14, wherein said exception-based view is functional upon selection of a displayed incident for said asset to display a predetermined set of charts informative of the selected incident, said charts comprising data from at least one of the set of: sensor data, estimated sensor values and residuals of said asset.

16. (New) A system according to claim 1, wherein said exception-based view is functional upon selection of a currently registered incident for said asset to display sensor names of sensors of said asset that are informative of the selected incident.

17. (New) A system according to claim 16, wherein said exception-based view is functional upon selection of a sensor name informative of the selected incident for said asset to display at least one chart of data selected from the set of sensor data, estimated sensor values and residuals of said asset.

18. (New) A system according to claim 1, wherein said graphical interface module provides said exception-based view of assets currently having registered incidents, for a subset of assets corresponding to a node selected from a hierarchical presentation by said graphical interface module of all assets.

19. (New) A system according to claim 18, wherein said hierarchical presentation includes nodes representing a hierarchy level corresponding to a collection of assets, a hierarchy level corresponding to individual assets, and a hierarchy level corresponding to modes of operation of individual assets.